only one used in the treatment of metritis. The indications for and tolerance of the *fine thread* bobbin are entirely different. In Apostoli's method the inverse is true; the maximum is often obtained, and it is only rarely, especially when the sound is in contact with both the cervix and body of the uterus, that a medium current is sufficient.

Should we increase the intensity of the current and force the quantity of the induced current? It may be answered that, if uterine faradization has failed in the cure of metritis, it is because the current was too feeble. To increase the action Apostoli has made several models of his electric sound, of different sizes and with the poles at varying distances apart. With this instrument even pregnancy is not a contraindication to the use of electricity. Very great care must be given to the position of the sound in case of pregnancy. It should *not* be carried *beyond* the internal os, but should be left in the cervix, and held there firmly with the hand, the index finger being in the vagina and against the posterior lip of the cervix. In some cases of very pronounced flexion, when the uterus is in an inflamed state and every movement is painful, it is prudent not to attempt to carry the sound into the uterine cavity. The general and absolute rule is that *no violent movement of any kind may be made;* faradization in these cases is only a sort of therapeutic hysterometre, and will give no good results if violence be used.

The sound should always be introduced without the speculum, and carried along the palmar surface of the index finger, should be carried in slowly, *without effort*, and arrested as soon as it comes in contact with any obstacle. In the treatment of metritis, and in the many indications after parturition, there is a large field of usefulness for the bipolar method.—*L'Union Méd.*, Oct. 28 and Nov. 1, 1884.

Electro-Therapeutics.

Dr. A. HUGHES BENNETT, in an introduction to a discussion on this subject in the Section of Pharmacology and Therapeutics at the fifty-second Annual Meeting of the British Medical Association, enumerates some of the chief morbid conditions for the treatment of which electricity is believed to be specially suitable. These, for practical purposes, may be considered under three classes: (1) diseases characterized by diminished functional activity; (2) those by increased functional activity; and (3) a large and miscellaneous collection of affections associated with local and general malnutrition. Under the first heading may be placed paralysis, anæsthesia, atrophy, sclerosis, and a variety of other morbid states. The etiology of these conditions is often obscure. The indication for their treatment is to excite and stimulate, to exalt functional activity, to remove anything which inhibits conduction, to overcome obstruction, and to modify abnormal nutrition-changes. The casual as well as the symptomatic manifestations must be brought under the influence of the current; and, in paralysis or anæsthesia, not only must the secondary local effects be treated, but the primary central lesions which caused them must be beneficially modified. Should any obstruction to natural impulses exist at any portion of the nerve-tract, this may often be successfully overcome by an electric stimulus, which thus artificially paves the way for subsequent normal impressions, and the consequent repetition of which ultimately ends in the transmissions of the healthy functions. Here, also, attempts are made to stimulate depressed functions into normal activity; and, by utilizing the catalytic properties of the current, in modifying nutrition, and influencing the trophic elements of the tissues, to facilitate the absorption of morbid products, and to promote the return of healthy structure. On these principles, there is obviously a large series of symptoms and diseases capable of being rationally submitted to the electric current, and it is probable that many of them receive more benefit from this method of treatment than from any other.

In the class of disorders characterized by excessive functional activity, there are pain, spasm, contracture, and their allied affections. Here, also, we are generally ignorant of the seat and nature of the primary lesion; but we assume the symptoms to be due to some molecular, or, so-called, functional derangement, the objective existence of which, however, we are unable to demonstrate. But, whatever may be the cause, the special property of the electric current, applied in a certain manner, is to relieve motor and sensory superexcitability, not only at the time of application, but often permanently afterwards; and, if this influence be maintained, the nutrition is so modified as to result in the entire removal of the disease itself. These sedative and alterative effects of the electric current obviously suggest its employment in a vast variety of morbid conditions.

Finally, the tonic, modifying, or catalytic actions of electricity may be employed in many local and general diseases. As has been already stated, the effects are supposed to be due to the influence the current exercises on the nutrition of the tissues, the modification of the trophic functions, the alteration in the circulation, and the stimulation of the absorptive processes. Of the exact nature of these actions we know nothing, and we are equally ignorant of the precise pathological conditions for which they are applied; and practical experience alone indicates their utility. Hence electricity has, with advantage, been employed in local ailments, as in rheumatism, gout, joint-affections, skin-diseases, chronic inflammations, and so on. So, also, in more general maladies, on the same principles, it has been found beneficial, as in hysteria, neurasthenia, chorea, general debility, and a variety of other miscellaneous constitutional disorders. It is especially among the neuroses, and so-called functional derangements, in other words, in those diseases characterized by much suffering and distress, without demonstrable tissue-change to account for them, that the greatest triumphs of electrical treatment are to be found.

Although these are the general conclusions which have been arrived at as to the utility of electricity as a therapeutic agent, much yet remains to be accomplished in this direction, and a vast field for future research and discovery still lies open for cultivation. For the solution of the complex problems involved, an accumulation of facts, observed and recorded with the most rigid accuracy and impartiality, is demanded. Instead of electro-therapeutic investigations being conducted, as is too frequently the case, by those ignorant of the elements of the science, and registered by them in an imperfect, illogical, and unscientific manner, the question requires for its truthful elucidation an extensive technical knowledge, dexterity and precision in the management and recording of details, and the absence of prejudicial opinions or interested motives. Doubtless, any one adopting this line of inquiry in such a scientific spirit would be rewarded by novel and important results.—*Brit. Med. Journ.*, Nov. 22, 1884.

MEDICINE.

Examination of the Blood for the Diagnosis of Acute Diseases.

In a communication to the Société Française pour l'Advancement de la Science, M. HAYEM says that most valuable work has been done in the past